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| ALPINE/BHGL P.O. Box 10395 Chicago, IL 60610 | | | NGUYEN, CUONG H | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/751,745

Applicant(s)

MORIE, NOBUHIDE

Examiner

CUONG H. NGUYEN

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/01/09 (RCE's amendment).
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
4a) Of the above claim(s) 14-16 is/are withdrawn from consideration.
5) ☒ Claim(s) 17 is/are allowed.
6) ☒ Claim(s) 1-6 and 8-13 is/are rejected.
7) ☒ Claim(s) 7 is/are objected to.
8) ☒ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

Status of the claims

1. This Office Action is the answer for an RCE's amendment filed on 7/01/2009.

Claims 1-13, and 17 are currently pending; claims 14-16 were withdrawn.

Response

2. From the submitted disclosure: (“[0009] However, in a detailed map displayed on the small scale, the user can confirm detailed information about the periphery of the vehicle, but cannot confirm a main road to which the traveling road the user is currently driving on is connected ahead and main roads extending on the right and left sides of the traveling road, because the main roads are not displayed. In a wide-area map displayed on the large scale and the map based on the main highways, as in the above publication Japanese Unexamined Patent Application Publication No. 2002-71362, the shapes of most roads including peripheral main roads can be recognized, but detailed information about an area surrounding the vehicle can hardly be recognized, although the user wants such information most of all.”) – it clearly says “main roads extending on the right and left sides of the traveling road” - i.e., displaying roads directly linking to a travel road., Matsuo et al. prior art has this feature (see Matsuo et al., Figs. 8-9, and 12).

Pending independent claims 1, 12, and 17 are clearly system claims – therefore, they comprise “physical” structural components/devices/modules. From that point of view, the examiner submits that there is nothing different between a “main road” (claimed by applicant) and a “recommended route” (can also be considered as a “main” road, by Matsuo’s reference) since applicant has freedom to use his own lexicographer – these languages have similar features/characteristics/meanings within a map; on a GPS device these “different expressions”

have similar meanings since applicant claims “a navigation system” It is a weight of the claimed term “a main road” - the Examiner gives same interpretations in any claim that is maintained in this application.

See also *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987)

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim.

3. The examiner respectfully maintains his interpretation of applicant's claimed language as in previous Office Action.

Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

4. Claims 1, 4, and 12 are rejected under 35 U.S.C. 103(a) as being obvious over Matsuo et al. (US Pat. 7,383,127).

A. As per independent claims 1, and 12: Matsuo et al. clearly teach a navigation system comprising:

- a monitor screen operable to display images (see Matsuo et al., FIG. 2 “VIDEO SIGNAL” outputs from “NTSC ENCODER 212”, and col. 6 lines 45-46);

- a map-image drawing unit operable to generate map image data for presentation of a map image in a window on the monitor screen (see Matsuo et al., FIG. 2 GRAPHIC PROCESSOR 211, and FIG. 10 “map data delivery center 80”);
- a simple-map drawing unit (i.e., a CPU 204 and FLASH MEMORY 209 of Matsuo et al., FIG. 2) operable to generate simple/rough map image data for presentation of a simple map image of a main road extending outside of the window (see Matsuo et al., FIG. 8 refs. 3010, 3020, and “extensive, rough map data are stored in the flash memory 209”); and
- an image combining unit (see Matsuo et al., FIG. 10 “map data delivery center 80”) operable to display the map image inside the window and the simple image of the main road outside of the window on the monitor screen (i.e., a CPU 204 and GRAPHIC PROCESSOR 211, GRAPHIC MEMORY 213 of Matsuo et al., FIG. 2); wherein the map image in the window is presented in greater detail than the simple map image located outside of the window (see Matsuo et al., claims 1-2).

For a claimed concept of: *“main roads extending on the right and left sides of the traveling road”* - i.e., displaying roads directly linking to a travel road, Matsuo et al. prior art has this feature (see Matsuo et al., Figs. 8-9, and 12).

The examiner submits that displaying two “main road” (claimed by applicant) and displaying a “recommended route” or two are obvious for a computer displaying task because Matsuo et al. also “displaying roads” for references, they have similar characteristics within a map; on a GPS device these “different language expressions” have similar meanings on a display screen.

it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the disclosure of Matsuo et al. to suggest of displaying two main roads outside a display window for an advantage of easy recognition of a traveling road position in reference to other familiar surroundings for a general recognition.

B. As per dependent claim 4: Matsuo et al. also teach that a simple map image is a deformed map image that schematically shows a traveling road along which a vehicle drives, a nearest main road that first crosses the traveling road ahead of the vehicle outside the map area, and right and left main roads that extend outside the window and that cross the nearest main road at intersections on the right and left sides of an intersection of the traveling road and the nearest main road (see Matsuo et al., FIG. 8).

5. Dependent claims 2, and 5 are rejected under 35 U.S.C. 103(a) as being obvious over Matsuo et al. (US Pat. 7,383,127).

A. As per dependent claim 2: Matsuo et al. do not explicitly disclose a name corresponding to a main road is displayed on the simple map image.

However, Matsuo et al. already teach in Fig.1 about a map data delivery center 80 includes a server 81, a map database (DB) 82 for storing map data, and a point information database (DB) 83 for storing information indicating the types, names, addresses, and telephone numbers of primary facilities such as restaurants, gas stations, leisure facilities, and public facilities in respective areas of a map.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the disclosure of Matsuo et al. to disclose a name

corresponding to a main road is displayed on the simple map image for an advantage of easy recognition of a main road as taught about recognition of primary facilities.

B. As per dependent claim 5: Matsuo et al. also teach that a simple-map image drawing unit schematically shows the nearest main road and the right and left main roads by curve lines.

The examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the disclosure of Matsuo et al. to show a nearest main road and right and left main roads by straight lines for a representation to a driver because there is a clear advantage of faster processing data, and saving memory storages if representing those roads by straight lines.

B. As per dependent claim 6: A limitation of this claim is a drawing unit changes a shape of a deformed map image depending on number of intersections and the number of road links on the nearest main road and the right and left main roads.

It would have been obvious to one of ordinary skill in the art to observe that changing a shape of an image to reflect a fact (e.g., having many intersections at a turn) is normal for a driver to easily recognize an approaching intersection for an advantage of a driver's convenience.

6. Dependent claims 8-11 are rejected under 35 U.S.C. 103(a) as being obvious over Matsuo et al., (US Pat. 7,383,127), in view of Loughmiller, Jr. et al. (US Pat. 4,914,605).

A. As per dependent claim 8: Matsuo et al. do not explicitly disclose a simple-map drawing unit detects whether a nearest main road enters a computer window.

However, Loughmiller, Jr. et al.'s could do what the applicants claim for a driving assisted device, (see Loughmiller, Jr. et al.'s navigation map with dynamic characteristics while moving along a street – col. 8 lines 35-53).

B. As per dependent claim 9: Loughmiller, Jr. et al., also teach that a drawing unit *updates a map image* when the nearest main road enters the map area.

See Loughmiller, Jr. et al., FIG. 2-1 (a dynamic transferring from window W1 to window W2), and col. 8 lines 35-53 with dynamic characteristics of a navigation map while a vehicle is moving along a street:

C. As per dependent claim 10: Loughmiller, Jr. et al. also suggest that wherein a nearest main road is drawn in map image when that road has an intersection within a distance from a vehicle (see Loughmiller, Jr. et al., col. 25 line 30 thru. Col. 26 line 7 - a navigation map with dynamic characteristics in vehicle's vicinity presentation while moving along a street.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the disclosure of Matsuo et al. with Loughmiller, Jr. et al., because their navigation aid enables a driver to extract information at a glance, thereby allowing him or her to navigate while attending to the function of driving. Their invention teaches a moving map display enabling the immediate vicinity of the vehicle to be displayed at an orientation which matches the vehicle's orientation, a scale-dependent street prioritization scheme which reduces the complexity of the map presentation enabling the driver to comprehend the map at a glance, a selective and dynamic labeling scheme which also simplifies extracting map information at a glance, and enables the driver to quickly locate the position of a destination and to conveniently monitoring a driving experience.

D. As per dependent claim 11: The examiner submits that as a default setting, Matsuo et al. suggest a monitor screen is switched to display the map image on the designated scale on the

entire monitor screen on the basis of the map image data generated by the map image drawing unit.

7. Dependent claim 3 is rejected under 35 U.S.C. 103(a) as being obvious over Matsuo et al. (US Pat. 7,383,127), in view of Applicants' Admission of Prior Art.

Matsuo et al. do not disclose that a main road has a rank higher than or equal to the rank of collector roads.

However, this fact is already admitted in para.[0024] of the disclosure "*Herein, main roads refer to roads above a given rank in road categories. For example, in Japan, roads are classified into the following ranks: from the highest rank, (1) national expressways, (2) city expressways, (3) national roads, (4) main local roads, (5) main local roads (designated city roads), (6) prefectural roads, (7) main ordinary roads, (8) ordinary roads, (9) narrow roads, (10) ferry routes, (11) car train tracks, and (12) others. In this embodiment, for example, roads of the ranks (1) to (4) are defined as main roads.*").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the disclosure of Matsuo et al. to disclose a main road has a rank higher than or equal to the rank of collector roads for an advantage of recognition of a statistic listing of roads, highway, second roads .etc. within a certain area.

8. Dependent claim 13 is rejected under 35 U.S.C. 103(a) as being obvious over Matsuo et al. (US Pat. 7,383,127), in view of Hirai et al., (US Pub. 20020156739 A1 - Publication 10/24/2002).

As per claim 13: Matsuo et al. do not explicitly disclose about using a wide-area map in vehicle navigation fields.

However, in the same field of application, Hirai et al. already disclose about using a wide-area map in navigation fields (see Hirai et al., paragraph [0090]).

Hirai et al. teach that a map-data-open area is specified by a rectangle, a country, or administrative district. However, the system may be so configured that a map type (e.g., a wide area map, a detailed map, or a city map) and/or service level, e.g., only map display or map display plus guidance, can be designated in accordance with a use fee.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the disclosure of Matsuo et al. with Hirai et al.'s disclosure because this makes it possible to set an area that is more suitable for a user's purposes such as display only in France, display plus guidance in Germany, and additional display of a city map in Italy.

Allowable Subject Matter

9. New claim 17 is allowable.

Conclusion

10. Claims 1-6, and 8-13 are not patentable. Claim 7 is objected. New claim 17 is patentable.
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG H. NGUYEN whose telephone number is 571-272-6759 (email address is cuong.nguyen@uspto.gov). The examiner can normally be reached on 7:30 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THOMAS G. BLACK can be reached on 571-272-6956. The Rightfax number for the organization where this application is assigned is 571-273-6759.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Please provide support, with page and line numbers, for any amended or new claim in an effort to help advance prosecution; otherwise any new claim language that is introduced in an amended or new claim may be considered as new matter, especially if the Application is a Jumbo Application.

/CUONG H. NGUYEN/
Primary Examiner
Art Unit 3661